



PCT

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/502,307**

**DATE: 07/29/2004**  
**TIME: 16:07:49**

**Input Set : A:\PTO.FG.txt**  
**Output Set: N:\CRF4\07292004\J502307.raw**

3 <110> APPLICANT: Burioni, Roberto  
 5 <120> TITLE OF INVENTION: HUMAN MONOClonAL ANTIBODY FAB FRAGMENTS DIRECTED AGAINST HCV  
 E2  
 6 GLYCOPROTEIN AND ENDOWED WITH IN VITRO NEUTRALIZING ACTIVITY  
 W--> 7 <130> FILE REFERENCE: 30068  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/502,307  
 C--> 9 <141> CURRENT FILING DATE: 2004-07-22  
 9 <150> PRIOR APPLICATION NUMBER: IT RM2002A/000049  
 10 <151> PRIOR FILING DATE: 2002-01-30  
 12 <160> NUMBER OF SEQ ID NOS: 24  
 14 <170> SOFTWARE: PatentIn version 3.1  
 16 <210> SEQ ID NO: 1  
 17 <211> LENGTH: 119  
 18 <212> TYPE: PRT  
 19 <213> ORGANISM: Homo sapiens  
 21 <400> SEQUENCE: 1  
 23 Leu Leu Glu Gln Ser Gly Ala Glu Val Lys Met Pro Gly Ala Thr Val  
 24 1 5 10 15  
 27 Lys Val Ser Cys Gln Ser Ser Arg Tyr Thr Phe Thr Ser Tyr Gly Ile  
 28 20 25 30  
 31 Gly Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Trp  
 32 35 40 45  
 35 Ile Ser Gly Tyr Thr His Glu Thr Lys Tyr Ala Gln Ser Phe Gln Gly  
 36 50 55 60  
 39 Arg Val Thr Met Thr Ala Glu Thr Ser Thr Gly Thr Ala Tyr Met Glu  
 40 65 70 75 80  
 43 Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Thr Tyr Tyr Cys Ala Arg  
 44 85 90 95  
 47 Asp Gly Gly Arg Val Val Val Pro Pro Thr His Leu Arg Ala Phe  
 48 100 105 110  
 51 Asp Val Trp Gly Gln Gly Thr  
 52 115  
 55 <210> SEQ ID NO: 2  
 56 <211> LENGTH: 104  
 57 <212> TYPE: PRT  
 58 <213> ORGANISM: Homo sapiens  
 60 <400> SEQUENCE: 2  
 62 Met Ala Glu Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
 63 1 5 10 15  
 66 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser His Arg Val Asn Asn Asn  
 67 20 25 30  
 70 Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
 71 35 40 45  
 74 Ile Ser Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser

**ENTERED**

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75      50          55          60
78 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu
79 65           70           75           80
82 Pro Asp Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Asp Ser Pro
83           85           90           95
86 Leu Tyr Ser Phe Gly Gln Gly Thr
87           100
90 <210> SEQ ID NO: 3
91 <211> LENGTH: 124
92 <212> TYPE: PRT
93 <213> ORGANISM: Homo sapiens
95 <400> SEQUENCE: 3
97 Leu Leu Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser
98 1           5           10           15
101 Leu Thr Cys Thr Val Ser Gly Val Ser Ile Ser Tyr Gly Gly Arg Gly
102           20           25           30
105 Val Ser Tyr Trp Gly Trp Val Arg Gln Ser Pro Gly Lys Gly Leu Glu
106           35           40           45
109 Trp Ile Gly His Ile Tyr Tyr Phe Gly Asp Thr Phe Tyr Asn Pro Ser
110           50           55           60
113 Leu Asn Asn Arg Ala Thr Ile Ser Ile Asp Ser Ser Lys Asn Gln Phe
114 65           70           75           80
117 Ser Leu Lys Leu Lys Ser Val Thr Ala Ser Asp Thr Ala Leu Tyr Phe
118           85           90           95
121 Cys Ala Arg Ser Thr Leu Gln Tyr Phe Asp Trp Leu Leu Thr Arg Glu
122           100          105          110
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126           115          120
129 <210> SEQ ID NO: 4
130 <211> LENGTH: 102
131 <212> TYPE: PRT
132 <213> ORGANISM: Homo sapiens
134 <400> SEQUENCE: 4
136 Met Ala Glu Leu Thr Gln Ser Pro Ser Phe Leu Ser Ala Ser Val Gly
137 1           5           10           15
140 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Val Thr Ile Leu
141           20           25           30
144 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Pro Pro Lys Ala Leu Ile
145           35           40           45
148 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
149           50           55           60
152 Ser Gly Ser Asp Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
153 65           70           75           80
156 Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Leu Asn Thr Tyr Pro Trp
157           85           90           95
160 Thr Phe Gly Gln Gly Thr
161           100
164 <210> SEQ ID NO: 5
165 <211> LENGTH: 116

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166 <212> TYPE: PRT
167 <213> ORGANISM: Homo sapiens
169 <400> SEQUENCE: 5
171 Leu Leu Glu Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val
172 1 5 10 15
175 Lys Val Ser Cys Lys Ala Ser Gly Asp His Tyr Gly Ile Asn Trp Val
176 20 25 30
179 Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly Ile Ile Pro
180 35 40 45
183 Val Phe Gly Thr Thr Tyr Ala Gln Lys Phe Gln Gly Arg Ala Thr
184 50 55 60
187 Ile Thr Ala Asp Asp Ser Thr Gly Thr Ala Phe Leu Glu Leu Thr Arg
188 65 70 75 80
191 Leu Thr Phe Asp Asp Thr Ala Val Tyr Phe Cys Ala Thr Pro His Gln
192 85 90 95
195 Leu His Val Leu Arg Gly Gly Lys Ala Leu Ser Pro Trp Asp Tyr Trp
196 100 105 110
199 Gly Gln Gly Thr
200 115
203 <210> SEQ ID NO: 6
204 <211> LENGTH: 102
205 <212> TYPE: PRT
206 <213> ORGANISM: Homo sapiens
208 <400> SEQUENCE: 6
210 Met Ala Glu Leu Thr Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly
211 1 5 10 15
214 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn
215 20 25 30
218 Leu Ala Trp Tyr Gln Gln Lys Arg Gly Gln Ala Pro Ser Leu Leu Ile
219 35 40 45
222 Tyr Gly Thr Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly
223 50 55 60
226 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser
227 65 70 75 80
230 Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Asp Trp Pro Ser
231 85 90 95
234 Thr Phe Gly Gln Gly Thr
235 100
238 <210> SEQ ID NO: 7
239 <211> LENGTH: 120
240 <212> TYPE: PRT
241 <213> ORGANISM: Homo sapiens
243 <400> SEQUENCE: 7
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246 1 5 10 15
249 Lys Val Ser Cys Lys Thr Ser Gly Gly Thr Phe Ser Thr Tyr Thr Phe
250 20 25 30
253 Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gly
254 35 40 45

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257 Ile Thr Pro Ile Ile Gly Ile Ala Asn Tyr Ala Arg Asn Phe Gln Asp  
258 50 55 60  
261 Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser Thr Val Tyr Met Glu  
262 65 70 75 80  
265 Val Arg Arg Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys  
266 85 90 95  
269 Thr Ser Glu Val Thr Ala Thr Arg Gly Arg Thr Phe Phe Tyr Ser Ala  
270 100 105 110  
273 Met Asp Val Trp Gly Gln Gly Thr  
274 115 120  
277 <210> SEQ ID NO: 8  
278 <211> LENGTH: 102  
279 <212> TYPE: PRT  
280 <213> ORGANISM: Homo sapiens  
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285 1 5 10 15  
288 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Asn Tyr  
289 20 25 30  
292 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
293 35 40 45  
296 Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
297 50 55 60  
300 Ser Gly Ser Trp Thr Glu Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro  
301 65 70 75 80  
304 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln His Leu Asn Thr Tyr Pro Trp  
305 85 90 95  
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309 100  
312 <210> SEQ ID NO: 9  
313 <211> LENGTH: 118  
314 <212> TYPE: PRT  
315 <213> ORGANISM: Homo sapiens  
317 <400> SEQUENCE: 9  
319 Leu Leu Glu Gln Ser Gly Ser Glu Val Lys Lys Pro Gly Ser Ser Val  
320 1 5 10 15  
323 Arg Val Ser Cys Thr Thr Ser Gly Gly Thr Leu Ser Asp Tyr Gly Phe  
324 20 25 30  
327 Asn Trp Leu Arg Gln Ala Pro Gly Gln Gly Pro Glu Trp Met Gly Gly  
328 35 40 45  
331 Ile Ile Pro Leu Phe Arg Arg Thr Thr Tyr Gly Gln Lys Phe Gln Gly  
332 50 55 60  
335 Arg Leu Thr Ile Thr Ala Asp Glu Ser Thr Gly Ala Thr Tyr Met Glu  
336 65 70 75 80  
339 Leu Ser Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
340 85 90 95  
343 Glu Lys Val Ser Val Leu Thr Gly Gly Lys Ser Leu His Tyr Phe Glu  
344 100 105 110  
347 Tyr Trp Gly Lys Gly Thr

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Input Set : A:\PTO.FG.txt  
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348 115  
351 <210> SEQ ID NO: 10  
352 <211> LENGTH: 102  
353 <212> TYPE: PRT  
354 <213> ORGANISM: Homo sapiens  
356 <400> SEQUENCE: 10  
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359 1 5 10 15  
362 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Arg  
363 20 25 30  
366 Leu Ala Trp Tyr Gln Gln Lys Arg Gly Gln Ala Pro Ser Leu Leu Ile  
367 35 40 45  
370 Tyr Asp Thr Ser Ser Arg Ala Thr Gly Val Pro Ala Arg Phe Ser Ala  
371 50 55 60  
374 Ser Gly Ser Gly Thr Gln Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser  
375 65 70 75 80  
378 Glu Asp Phe Ala Leu Tyr Tyr Cys Gln Gln Tyr Asn Asp Trp Pro Ser  
379 85 90 95  
382 Thr Phe Gly Gln Gly Thr  
383 100  
386 <210> SEQ ID NO: 11  
387 <211> LENGTH: 118  
388 <212> TYPE: PRT  
389 <213> ORGANISM: Homo sapiens  
391 <400> SEQUENCE: 11  
393 Leu Leu Glu Glu Ser Gly Ala Glu Val Lys Lys Pro Gly Ser Ser Val  
394 1 5 10 15  
397 Lys Val Ser Cys Lys Thr Ser Gly Asp Thr Phe Arg Tyr Gly Ile Thr  
398 20 25 30  
401 Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Gln Ile  
402 35 40 45  
405 Met Pro Thr Phe Ala Thr Ala Thr Tyr Ala Gln Arg Phe Gln Gly Arg  
406 50 55 60  
409 Val Thr Ile Ser Ala Asp Glu Ser Thr Ser Thr Ala Tyr Leu Glu Val  
410 65 70 75 80  
413 Arg Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Thr Pro  
414 85 90 95  
417 Arg Gln Val Thr Ile Leu Arg Gly Pro Lys Ala Leu Ser Pro Trp Asp  
418 100 105 110  
421 Tyr Trp Gly Gln Gly Thr  
422 115  
425 <210> SEQ ID NO: 12  
426 <211> LENGTH: 102  
427 <212> TYPE: PRT  
428 <213> ORGANISM: Homo sapiens  
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432 Met Ala Glu Leu Thr Gln Ser Pro Ala Thr Leu Ser Ala Ser Pro Gly  
433 1 5 10 15  
436 Glu Arg Ala Ser Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Asn

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/502,307

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TIME: 16:07:50

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\07292004\J502307.raw

L:7 M:283 W: Missing Blank Line separator, <130> field identifier

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date